

A vision for safe drinking water: Har Ghar Nal Ka Jal experience

Every household should access to “tap water”. This has been one of the seven resolves by the Government of Bihar. A big dream by any standard! As per Census of India 2011, the households in the rural areas accessing tap water both from treated and untreated sources were barely 3%. Low cost handpumps remained the main source of drinking water and as per Census 2011, the dependence was over 80% in the rural areas. But the State (population 100 million in 2011) had the advantage of having such sources either located within or near premises. Only 11% of the rural households collected from the handpumps located away (Census 2011). In the urban areas too, only 7% households collected water from the sources located away (Census 2011). So the decision to move to tap water for every household needs some explanation. First of all, the household should get safe (tap) water at their homes and have a reduced the risks of drinking contaminated water from handpumps. Second, the borewell/ tubewell a safer option when compared to shallow handpumps, was accessed only by 2% of the households in the villages. Third, nearly one-third of the Gram Panchayats of the State faced one or more type of ground water chemical contamination such as fluoride, arsenic and iron. Thus, to plan and implement this *nischay* (resolve) in mission mode this should be seen as an “unflinching endeavour” to provide clean drinking water in the homes¹. The scheme “Har Gar Nal Ka Jal” received the official approval in the year 2016. Its three components- the population living in the rural areas, quality affected rural habitations and the urban areas represent the implementation of State’s Good Governance programme 2015-20.

Key processes

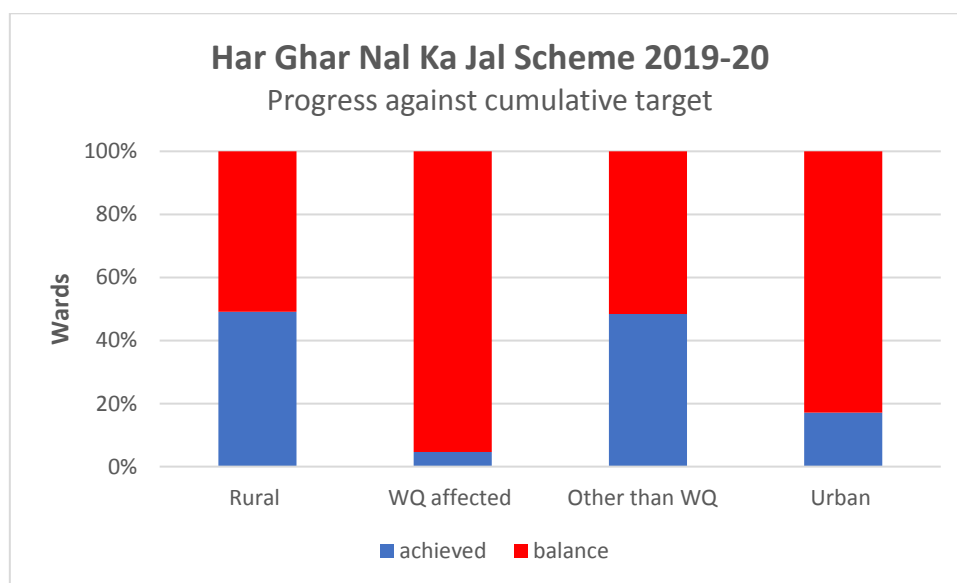
Public Health Engineering Department (PHED) of the State Government has the authority to plan and implement drinking water schemes. However, a key shift in the implementation plan under ‘Har Ghar Nal Ka Jal’ Scheme of the State had been the involvement of two more departments-The Panchayati Raj Department for the rural areas and The Urban Development and Housing Department for the urban areas. Now the role of PHED focused mainly on the Gram Panchayats that faced water quality problems.

The second shift was involving the community in planning, implementation and operation & maintenance. The Ward, identified by The Panchayati Raj Department that became the unit, unlike the rural habitations which were traditionally considered for designing water supply schemes. The arrangement worked in case of the installation of deep borewells, handpumps and other spot sources but now the focus had moved to micro and mini sized schemes. The objective was to provide a single functional tap water connection to every household.

Third, operation and maintenance (O&M) of the schemes became the responsibilities of the elected ward members. Typically the implementation in wards engage the local government functionaries in a series of training. Information awareness on O&M of the schemes, the development of water safety plans, water quality tests through laboratories, sanitary inspection of sources and other relevant issues are the part of the training at the local levels that runs like a campaign in a cluster of wards.

Progress till date

Almost half of the total targeted wards in the rural areas were achieved by the Panchayati Raj Department. As per the report, a cumulative target to provide potable (safe drinking) water facilities to 58,612 rural wards, work was completed in 28,665 rural wards by the end of FY 2019-20. Similarly, as per the progress in Other than Water Quality Affected areas, PHED reached nearly to the half mark of the cumulative target that was 25,582 wards. But the progress in the water quality areas to address chemical contaminations were as low as 5% (1,405 out of 30,497 wards). In case of urban areas the achievement were 17% (512 out of 3,340 wards) of the cumulative target.



Challenges

Ground water based mini and micro projects are comparatively less expensive but have their own challenges in management. Limiting to routine operation and maintenance issues only, mechanical problems like failure of motor have been provisioned with a spare water motor, in order to maintain unhindered supply. Again, the provisions for chlorination to keep away any bacterial contamination have been made. But to achieve the resolve for every household, the schemes have a long way to go.

Here are the two reasons

- 1) slow progress in rural water quality affected areas and urban wards can delay in achieving in safe drinking water for all,

2) the provision to achieve eight hours of daily supply of safe drinking water need support of routine maintenance, example the payment of operator's salary, and infrastructure facilities like the laboratories to conduct water sample tests, trained professional and supplies of equipment.

It been an experience that small scale piped water supply projects usually have shorter life-span, however the scheme has accelerate progress. As per 'Jal Jeevan' Mission dashboard, little over 12% household in the rural Bihar have now access to functional tap connectionⁱⁱ. We should expect the next round of Census of India opens up a rational basis for comparison.

ⁱ Bihar Vikas Mission, <https://www.bvm.bihar.gov.in/content/684/mission>

ⁱⁱ Jal Jeevan Mission, <https://ejalshakti.gov.in/WaterDashboard/HouseHoldConnection.aspx>